

ABSTRACT

Narrow trenches in a substrate tend to fill more rapidly than wide trenches. This results in a non-planar surface once all trenches have been filled. The present invention solves this problem by performing the electro-deposition in two steps. The plating bath used during the first step, is optimized for filling narrow trenches while the plating bath used during the second step, is optimized for filling wide trenches. The net result is a final layer having a planar surface, with all trenches being properly filled.